

# MATERIAL SAFETY DATA SHEET



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Date Issued: 02/02/2010

MSDS No: KAESER SIGMA M-460 022307

## SIGMA M-460 Air Compressor Fluid

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** SIGMA M-460 Air Compressor Fluid

**GENERAL USE:** Lubricant and corrosion inhibitor

**CHEMICAL FAMILY:** Synthetic based lubricant

**MANUFACTURER**

Manufactured for Kaeser Compressors, Inc.

511 Sigma Drive

Fredericksburg, VA 22408

**Product Stewardship:** 281-354-8600

**24 HR. EMERGENCY TELEPHONE NUMBERS**

**USA :** 800-424-9300

**International :** 703-527-3887(collect calls accepted)

### 2. HAZARDS IDENTIFICATION

**POTENTIAL HEALTH EFFECTS**

**EYES:** May cause irritation.

**SKIN:** May irritate the skin after prolonged periods of contact.

**INGESTION:** May cause diarrhea.

**INHALATION:** Hydrocarbon mist may line breathing passages with oil making breathing difficult.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name                 | Wt.%    | CAS        | EINECS    |
|-------------------------------|---------|------------|-----------|
| Poly Ester Synthetic          | 5 - 10  | 68515-49-1 |           |
| Hydrogenated ISO-Paraffin     | 85 - 90 | 64742-54-7 | 265-157-1 |
| Synthetic Oxidation Inhibitor | 0.5 - 1 | 68921-45-9 |           |
| Synthetic Corrosion Inhibitor | 0.5 - 1 | 28015-99-8 |           |
| Synthetic Ashless EP Additive | 1 - 5   | 10254-57-6 |           |
| Synthetic Oxidation Inhibitor | 0.5 - 1 | 41484-35-9 |           |

**COMMENTS:** This product contains no hazardous substances within the definition of OSHA Regulation 29 CFR 1910.1200.

### 4. FIRST AID MEASURES

**EYES:** Flush with water until all residual material is gone. If irritation persists, seek medical help.

**SKIN:** Wash thoroughly with hand cleanser, followed by soap and water. Contaminated clothing should be dry cleaned before reuse.

**INGESTION:** Wash out mouth immediately. Do not induce vomiting. Consult physician.

**INHALATION:** Clear air passage. If respiratory difficulty continues, seek medical help.

### 5. FIRE FIGHTING MEASURES

**FLASH POINT AND METHOD:** 218°C (425°F) COC

**AUTOIGNITION TEMPERATURE:** > 315°C (600°F)

**EXTINGUISHING MEDIA:** Foam, dry powder, Halon®, carbon dioxide, sand, earth and water mist.

Unsuitable: Water jet.

**OTHER CONSIDERATIONS:** Not flammable at ambient temp.

**FIRE FIGHTING EQUIPMENT:** Self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Contain spill and keep from entering waterways. Absorb on porous material. Large quantities can be pumped.

### ENVIRONMENTAL PRECAUTIONS

**LAND SPILL:** Do not allow it to enter drains.

**SPECIAL PROTECTIVE EQUIPMENT:** Wear gloves and protective overalls.

## 7. HANDLING AND STORAGE

**HANDLING:** No special handling precautions necessary.

**STORAGE:** Do not store at elevated temperatures.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) |      |                 |                   |           |                   |              |                   |
|---|------|-----------------|-------------------|-----------|-------------------|--------------|-------------------|
|   |      | EXPOSURE LIMITS |                   |           |                   |              |                   |
|   |      | OSHA PEL        |                   | ACGIH TLV |                   | Supplier OEL |                   |
| Chemical Name                               |      | ppm             | mg/m <sup>3</sup> | ppm       | mg/m <sup>3</sup> | ppm          | mg/m <sup>3</sup> |
| Hydrogenated ISO-Paraffin                   | TWA  | NL [1]          | 5 [1]             | NL        | 5                 | NL           | NL                |
|   | STEL | NL              | NL                | NL        | 10                | NL           | NL                |
| <b>Footnotes:</b>                           |      |                 |                   |           |                   |              |                   |
| 1. NL = Not listed                          |      |                 |                   |           |                   |              |                   |

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Glasses, if applied to parts in motion.

**SKIN:** Oil-proof gloves for hypersensitive persons.

**RESPIRATORY:** Hydrocarbon absorbing respirator if misting.

**PROTECTIVE CLOTHING:** Overalls.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Mild Hydrocarbon

**COLOR:** Golden

**pH:** Neutral

**PERCENT VOLATILE:** None

**VAPOR PRESSURE:** < 0.01

**VAPOR DENSITY:** Greater than air

**BOILING POINT:** > 316°C (600°F)

**POUR POINT:** -30°C

**FLASH POINT AND METHOD:** 218°C (425°F) COC

**SOLUBILITY IN WATER:** Insoluble

**EVAPORATION RATE:** Negligible

**DENSITY:** > 0.8

**OXIDIZING PROPERTIES:** None

## 10. STABILITY AND REACTIVITY

**STABILITY:** Chemically stable under normal conditions. No photoreactive agents.

**CONDITIONS TO AVOID:** Powerful sources of ignition and extreme temperatures.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur and nitrogen. Residue mainly comprised of soot and mineral oxides.

**INCOMPATIBLE MATERIALS:** Strong inorganic and organic acids, oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**ORAL LD<sub>50</sub>:** > 2000 mg/kg

**Notes:** Extrapolated from component data

**INHALATION LC<sub>50</sub>:** Not applicable.

**SKIN EFFECTS:** Very mild

**CHRONIC:** None known.

**SUBCHRONIC:** Not known

### CARCINOGENICITY

**IARC:** No

**NTP:** No

**OSHA:** No

**SENSITIZATION:** Not known

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Due to its fluid nature and specific gravity, this product will float or spread across water making it a nuisance contaminant. It is not thought to be toxic to marine or land organisms.

**BIOACCUMULATION/ACCUMULATION:** Relatively well behaved. Bioaccumulation potential nil.

**GENERAL COMMENTS:** When released into the environment, adsorption to sediment and soil will be the predominant behavior.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Consider recycling. This product, as sold, does not meet the RCRA characteristics of a hazardous waste. Under RCRA, it is the responsibility of the user, at the time of disposal, to determine whether the product meets the RCRA criteria for hazardous waste. Contact a waste disposal company or local authority for advice.

**EMPTY CONTAINER:** See waste disposal section listed above.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**UN/NA NUMBER:** N/A

**OTHER SHIPPING INFORMATION:** Nonhazardous

**ROAD AND RAIL (ADR/RID):** Bulk Nonhazardous

**AIR (ICAO/IATA):** Bulk Nonhazardous

**VESSEL (IMO/IMDG):** Bulk Nonhazardous

## 15. REGULATORY INFORMATION

### UNITED STATES

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** None

**313 REPORTABLE INGREDIENTS:** N/A

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

**CERCLA REGULATORY:** Nonhazardous

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

| Chemical Name             | CAS        |
|---------------------------|------------|
| Hydrogenated ISO-Paraffin | 64742-54-7 |

**TSCA REGULATORY:** All components are listed

**CALIFORNIA PROPOSITION 65:** This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

**CANADA**

**WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):** Not regulated

**DOMESTIC SUBSTANCE LIST (INVENTORY):** All components are listed

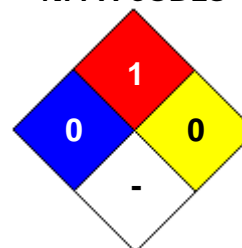
**16. OTHER INFORMATION**

**REVISION SUMMARY:** New MSDS

**HMIS RATING**

|                             |          |
|-----------------------------|----------|
| <b>HEALTH:</b>              | <b>0</b> |
| <b>FLAMMABILITY:</b>        | <b>1</b> |
| <b>PHYSICAL HAZARD:</b>     | <b>0</b> |
| <b>PERSONAL PROTECTION:</b> |          |

**NFPA CODES**



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